

Teacher saves teenager's life after heart attack



Maine East physical education teacher Scott Smith and Glenview's Nathan Miller, 15, attend an activities night for American Heart Month on Feb. 14 at Maine East. Photo submitted

On a rainy August morning during the second week of the school year, Maine East physical education teacher Scott Smith had a flat tire.

As he stood on the side of the road and debated whether or not he would make it to his morning classes, he didn't realize 15-year-old Nathan Miller's life would depend upon it.

With first bell approaching, Smith called his supervisor to explain he would miss first and second periods. But after hanging up, Smith's wife volunteered to stay with the car at the shop while Smith took her vehicle so he could make it to his second class.

Nathan Miller, a Glenview native, had transferred into his second-period physical education class only a few days earlier. Although Nathan played soccer and ran track, his path hadn't crossed with the football and baseball coach.

That is, until he collapsed on the track during physical education that day, going into cardiac and respiratory arrest in Smith's arms.

Smith had brought the class outside for tempo-runs on the track. The rainy weather earlier that morning had deterred other teachers from bringing their classes outside.

Although they were the only ones outside, Smith remembers being glad to be out of the stuffy gym in the August humidity.

He also remembers glancing past new kid Nathan, who was running around the corner with two other students, before turning back and seeing him fall face down on the track.

Smith rushed to Miller's side and checked his breathing. It was slow, but it was there. The student leader that would normally help in this situation was absent that day, so Smith yelled at the students to find assistance as he dialed 911.

A few seconds into the phone call, Nathan inhaled deeply and then stopped breathing altogether.

Without a student leader or access to an automated external defibrillator, he began manual compressions — 15 to 18 between resuscitation breaths — as he waited desperately to hear the sirens of the ambulance and see the paramedics running down the hill.

"I have been a coach and I have been in high [intensity] practices and stuff like that for 25 years," Smith said. "From all of that training I have done year in and year out to keep my certification, I have never had to use it. Thank God I just responded the way I was supposed to and did what was necessary and Nathan is here for a good reason."

Although Nathan made it to the hospital and survived the ordeal, he spent the next three days in the hospital with his family only to learn that a diagnosis could not be determined.

Shelley Miller, Nathan's mother, was not satisfied with the response. With hopes of a more detailed diagnosis and in-network coverage, she took her son to Lurie Children's Hospital to see Dr. Nina Gotteiner, a pediatric echocardiogram heart specialist.

"I ended up going to talk to another pediatric cardiologist from Lurie Children's and she did another [echocardiogram] and [electrocardiogram]," she said. "She looked at it and she saw exactly what had happened. Within 15 minutes, he was diagnosed with a congenital coronary anomaly and she told me usually those are fatal in teenagers and young adults."

According to the American Heart Association, a congenital coronary anomaly is an umbrella term for a diverse group of congenital disorders whose manifestations and pathophysiological mechanisms are highly variable. The diagnosis can include a wide variety of defects in the cardiovascular system that develop in the womb but usually go unnoticed until adolescence or adulthood. The defect is usually symptomless until the person passes out during exercise or goes into cardiac arrest.

"It's very rare and probably most people who faint with exercise are not going to have it, so luckily the gym teacher was there who knew CPR," Gotteiner said. "Somebody got to him quickly and was able to resuscitate him and we were able to get the diagnosis before he exercised again because, you know, with some people, this diagnosis is only made on autopsy."

The doctors at Lurie Children's Hospital discovered that Nathan's left coronary artery went incorrectly between his aorta and pulmonary artery, performed open-heart surgery, and fixed the defect.

Earlier in February, six months after his heart attack, Nathan was approved for light activity.

"This is why I go to work," Gotteiner said. "There is nothing better than positively impacting the life of a child. Nathan is now going to have a long life, able to be active and have a great recovery, and I am just so happy things turned out as well as they did for him. Had he not had the diagnosis and gone on to exercise again, something could have happened and he could have died. Whenever we can prevent an outcome, it's a win."

"It's so important for teachers and everybody just to know CPR and how to work an [automated external defibrillator] in case they need to do that," Shelley Miller added. "[We need] more awareness of how important those things are."

In recent years, many schools have employed the electrocardiogram screening for students, especially athletes, to spot irregularities in heart rhythms. Although Nathan's defect required a more extensive echocardiogram screening, Gotteiner advises anyone who experiences other symptoms — such as passing out, or experiencing seizures or exercise-induced chest pains — to see a cardiovascular specialist.

Smith, for his part, encourages everyone to be certified and prepared.

"It's funny. Sometimes you think 'okay, I have to go get recertified. Oh, I have to go do this again,'" Smith said. "I don't think that way anymore. I want to make sure I am up to date with techniques and what's going on and you just never know. You just never know when you are going to be in that situation and you are going to have to decide to react and hopefully do what is necessary to save a life."